

IN THE CLAIMS:

Please amend claims 22-46 as follows.

Claims 1-21. (Cancelled).

22. (Currently Amended) A method comprising:

generating a unique internet protocol address from the geographical location data,
wherein the internet protocol address has a global prefix portion and a local suffix
portion, and

wherein the geographical location information is coded in the suffix ~~part~~ portion of
the address.

23. (Currently Amended) ~~A~~ The method according to claim 22, wherein the
geographical location information is a three dimensional coordinate.

24. (Currently Amended) ~~A~~ The method according to claim 22, wherein the
geographical location information is a two dimensional coordinate.

25. (Currently Amended) ~~A~~ The method according to claim 22, wherein the
geographical location information includes additional information.

26. (Currently Amended) ~~A~~The method according to claim 25, wherein the additional information is node specific information such as terminal number, node name, node layer information, street address, serial number, color or weight.

27. (Currently Amended) ~~A~~The method according to claim 22, wherein the address based on the geographic location information assigned to a mobile device is updated when the mobile device moves and said new address is informed to ~~the~~a register that controls the location of said mobile device.

28. (Currently Amended) ~~A~~The method according to claim 22, wherein the address assigned to a mobile device comprises ~~the~~a device number and geographical location information of ~~the~~a router to which the mobile device is connected to.

29. (Currently Amended) ~~A~~The method according to claim 22, wherein the geographical location information is automatically detected.

30. (Currently Amended) ~~A~~The method according to claim 22, wherein the geographical information is manually entered.

31. (Currently Amended) ~~A~~The method according to claim 22, wherein ~~the~~ addressing of subnets of ~~the~~a network is based on the geographic location of ~~the~~ routers.

32. (Currently Amended) ~~A~~The method according to claim 22, wherein the addresses are used to improve the network performance by using the geographic location information in directing the radio signal to destination when radios are used in physical layer.

33. (Currently Amended) ~~A router for~~An apparatus comprising:
~~routing a router configured to route~~ internet protocol packets in which ~~the~~a unique address is based on geographical location information and has a global prefix portion and a local suffix portion,

wherein the ~~router~~apparatus is configured to harness the geographic location information coded to the suffix portion of the address in routing packets to ~~the~~ destination nodes located in ~~the~~a subnetwork.

34. (Currently Amended) ~~A router~~The apparatus according to claim 33, wherein the geographic location information is a three dimensional coordinate.

35. (Currently Amended) ~~A router~~The apparatus according to claim 33, wherein the geographic location information is a two dimensional coordinate.

36. (Currently Amended) ~~A router~~The apparatus according to claim 33, wherein the geographical location information includes additional information.

37. (Currently Amended) ~~A router~~ The apparatus according to claim 36, wherein the additional information is node specific information such as terminal number, node name, street address, serial number, color or weight.

38. (Currently Amended) ~~A router~~ The apparatus according to claim 33, wherein the ~~router~~ apparatus is configured to update the address assigned to a mobile device when the mobile device moves.

39. (Currently Amended) ~~A router~~ The apparatus according to claim 33, wherein the ~~router~~ apparatus is configured to assign to a mobile device an address which consists of a device number and a geographical location information of ~~the~~ a router to which the mobile device is connected to.

40. (Currently Amended) ~~A router~~ The apparatus according to claim 33, wherein the ~~router~~ apparatus is configured to query the geographic location information from ~~the~~ a client attached to ~~the~~ a network.

41. (Currently Amended) ~~A router~~ The apparatus according to claim 33, wherein the ~~router~~ apparatus is configured to assign the geographic location information and terminal device number to a client attached to ~~the~~ a network.

42. (Currently Amended) ~~A router~~The apparatus according to claim 33, wherein the ~~router~~apparatus is configured to utilize the geographic location information in directing the radio signal to destination when radios are used in physical layer.

43. (Currently Amended) An apparatus comprising:
~~generating means for generating unique internet protocol address from the geographical location data,~~
~~wherein the internet protocol address has a global prefix portion and a local suffix portion, and~~
~~wherein the geographical location information is coded in the suffix part of the address.~~
routing means for routing internet protocol packets in which a unique address is based on geographical location information and has a global prefix portion and a local suffix portion,
wherein the apparatus is configured to harness the geographic location information coded to the suffix portion of the address in routing packets to destination nodes located in a subnetwork.

44. (Currently Amended) A unique internet protocol address embodied on a computer-readable medium comprising:

a global prefix portion and a local suffix portion,

wherein the unique internet protocol address is generated from geographical location data of one of a node and a router connected to said node, and

wherein said geographical location information is coded in said suffix ~~part~~portion of said unique internet protocol address.

45. (Currently Amended) A routing component ~~for comprising:~~

~~routing~~ a router configured to route internet protocol packets,

wherein a unique internet protocol address is based on geographical location information of one of said routing component and a node connected to said routing component, ~~and~~

wherein said unique internet protocol address has a global prefix portion and a local suffix portion, and

wherein said routing component is configured to utilize said geographic location information, said geographic location information being coded to said suffix portion of said unique internet protocol address, in routing packets to destination nodes located in a subnetwork.

46. (Currently Amended) A system ~~for routing internet protocol packets, said system comprising:~~

a router configured to route data packets between internet and a subnetwork, said subnetwork comprising a group of nodes,

wherein a unique internet protocol address is based on geographical location information of one of said router and one node of said group of nodes, and

wherein said unique internet protocol address has a global prefix portion and a local suffix portion, said router being configured to utilize said geographic location information, the geographic location information being coded to said suffix portion of said unique internet protocol address, in routing packets to destination nodes located in said subnetwork.